

ABSTRACT

The invention relates to an initiator system for triggering a radical polymerization reaction of a preparation that contains monomers and/or oligomers having ethylenically unsaturated groups. The initiators used are open-chain and/or cyclic N, N-diacylhydroxylamines of the general formula $R-CO-N(OH)-CO-R'$. The invention also relates to a method for starting a radical polymerization reaction by way of the thermally initiated formation of oxyl radicals from open-chain and/or cyclic N,N-diacylhydroxylamines or the O-alkyl or O-acyl derivatives thereof having the general formulae $R-CO-N(OH)-CO-R'$, $R-CO-N(O-R)-CO-R'$ or $R-CO-N(O-CO-R')-CO-R'$, wherein R, R' and R' are the same or different organic substituents and R can be linked with R'.